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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,388	02/16/2007	Sascha Kopplin	10191/4156	2563

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EXAMINER	
PATEL, NIMESH G	

ART UNIT	PAPER NUMBER
2111	

MAIL DATE	DELIVERY MODE
03/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,388	KOPPLIN, SASCHA	
	Examiner	Art Unit	
	NIMESH G. PATEL	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osmer et al.(US 2001/0010424) and Denuto et al.(Lin Bus and its Potential for use in Distributed Multiplex Applications), submitted by Applicant.

3. Regarding claim 11, Osmer discloses a connecting element for weight measurement in a vehicle seat, comprising: a connecting arrangement to a bus; and a bus communications arrangement(Paragraph 31).

Osmer does not specifically disclose a single wire bus. However, Denuto discloses a single wire bus(Figure 4). It would have been obvious to one of ordinary skill in the art to use a single wire bus since this reduces the number of wires needed in the system.

4. Regarding claim 12, Denuto discloses a connecting element, wherein the connecting arrangement is configured so that the connecting arrangement indicates installation position of the connecting element using hardware encoding(Page 6, Last Paragraph).

5. Regarding claim 13, Denuto discloses a connecting element, wherein the connecting arrangement includes: a voltage connection, a data communications connection, a ground connection(Figure 4), but does not specifically disclose a configuration connection, a wiring configuration of the configuration connection indicating the installation position. However, official notice is being taken that configuration connections are well known in the art. It would have

been obvious to one of ordinary skill in the art to use a configuration connection since this can be used to configure the sensors and use a wiring configuration indicating the position of the sensors since this indication can be used to associate the position of the sensor with the appropriate measurement values to properly calculate weight distribution.

6. Regarding claim 14, Osmer does not specifically disclose a connecting element, wherein the bus communications arrangement includes a toroidal core store that stores a measured value for the weight measurement, the connecting element further comprising an indicator to retrieve the measured value. However, official notice is being taken that toroidal core stores are well known in the art and it would have been obvious to one of ordinary skill in the art to use toroidal core store to store the weight measurement values for the sensors.

7. Regarding claim 16, Denuto discloses a connecting element, wherein the connecting element is configured as a slave to the bus communications(Figure 4).

8. Regarding claim 19, Osmer discloses a bus system, comprising: a control unit for activating a personal protective device as a master; at least two connecting elements configured for weight measurement in a vehicle seat as slaves(Paragraph 31).

Osmer does not specifically disclose a bus system having a single-wire bus. However, Denuto discloses a single wire bus(Figure 4). It would have been obvious to one of ordinary skill in the art to use a single wire bus since this reduces the number of wires needed in the system.

9. Regarding claim 20, Osmer discloses a bus system, wherein the at least two connecting elements include four connecting elements installed in the vehicle seat(Paragraph 31).

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osmer, Denuto and Rudduck(US 2005/0172462).

11. Regarding claim 15, Osmer and Denuto do not specifically disclose a connecting element, further comprising: a memory storing a serial number that characterizes the connecting

element. However, Rudduck discloses a memory storing a serial number that characterizes the connecting element(Paragraph 88). It would have been obvious to one of ordinary skill in the art to store a serial number in the connecting element since this can uniquely identify each sensor made by the manufacturer.

12. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osmer and Rudduck.

13. Regarding claim 17, Osmer discloses a method for bus communications between a control unit for activating a personal protective device as a master, and at least one connecting element for weight measurement in a vehicle seat as a slave(Paragraph 31).

Osmer does not specifically disclose causing the control unit to assign to the at least one connecting element a respective address in accordance with a respective serial number of the at least one connecting element. However, Rudduck discloses assigning a connecting element a respective address in accordance with a respective serial number(Paragraph 88). It would have been obvious to one of ordinary skill in the art to combine the teachings of Osmer and Rudduck to use serial number addressing since this would give a unique address and identifier to each sensor, thereby distinguishing one sensor from the other sensors and establishing communications to each specific sensor as needed by the controller.

14. Regarding claim 18, Osmer discloses a method, further comprising: sending the at least one connecting element a request message; and transmitting from the connecting element a measured value to the control unit as a function of the request message(Paragraph 31).

15. Regarding claim 19, Osmer discloses a bus system, comprising: a control unit for activating a personal protective device as a master; at least two connecting elements configured for weight measurement in a vehicle seat as slaves(Paragraph 31).

Osmer does not specifically disclose a bus system having a single-wire bus. However, Rudduck discloses a single wire bus(Paragraph 7). It would have been obvious to one of ordinary skill in the art to use a single wire bus since this reduces the number of wires needed in the system.

16. Regarding claim 20, Osmer discloses a bus system, wherein the at least two connecting elements include four connecting elements installed in the vehicle seat(Paragraph 31).

Response to Arguments

17. Applicant's arguments filed December 10, 2007 have been fully considered but they are not persuasive.

18. In response to applicant's argument that the prior art teaches away from the claimed subject matter because Osmer's system is analog-based system and Denuto's system is a digital system, Examiner respectfully disagrees. Nowhere does Osmer specify the sensors are analog or digital. Furthermore, even if the sensors are analog, it is implicit that there would be an analog to digital converter so that analog signals can be interpreted in the controller. One of ordinary skilled in the art would also recognize that analog to digital converters are well known in the art and it would have been obvious to use analog to digital converters to interface analog and digital systems.

19. In response to applicant's argument that the there is no requirement for or benefit of addressing in Osmer because the sensors are directly connected to the controller, Examiner respectfully disagrees. Nowhere does Osmer specify that there is a dedicated connection from each of the sensors to the controller. Osmer simply states that the signals from the sensors are transmitted over wiring harness 58. Referring to Figure 1, wiring harness 58 is shown as a

single bus. The wiring harness does not mean that there is a dedicated connection for each sensor, as stated by the applicant.

20. In response to applicant's argument that Ruddock does not disclose a single wire bus and that the combination would teach away from the claimed subject matter because Osmer's system is analog-based system and Ruddock's system is a digital system, Examiner respectfully disagrees. Rudduck does disclose a single wire bus(Paragraph 7; LIN bus). Nowhere does Osmer specify the sensors are analog or digital. Furthermore, even if the sensors are analog, it is implicit that there would be an analog to digital converter so that analog signals can be interpreted in the controller. One of ordinary skilled in the art would also recognize that analog to digital converters are well known in the art and it would have been obvious to use analog to digital converters to interface analog and digital systems.

21. Therefore, applicant's arguments are not persuasive.

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nimesh G. Patel whose telephone number is 571-272-3640. The examiner can normally be reached on M-F, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinehart H. Mark can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nimesh G Patel
Examiner
Art Unit 2111

/Glenn A. Auve/
Primary Examiner, Art Unit 2111